

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P299407

Luminaire Tested: **GLNA-AF-03-LED-E1-SLR-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299407  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194679)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-03-LED-E1-SLR-7027-800  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill  
Light Eliminator Right OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11172.9 lumens  
Efficiency: N/A  
Efficacy: 90.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G3

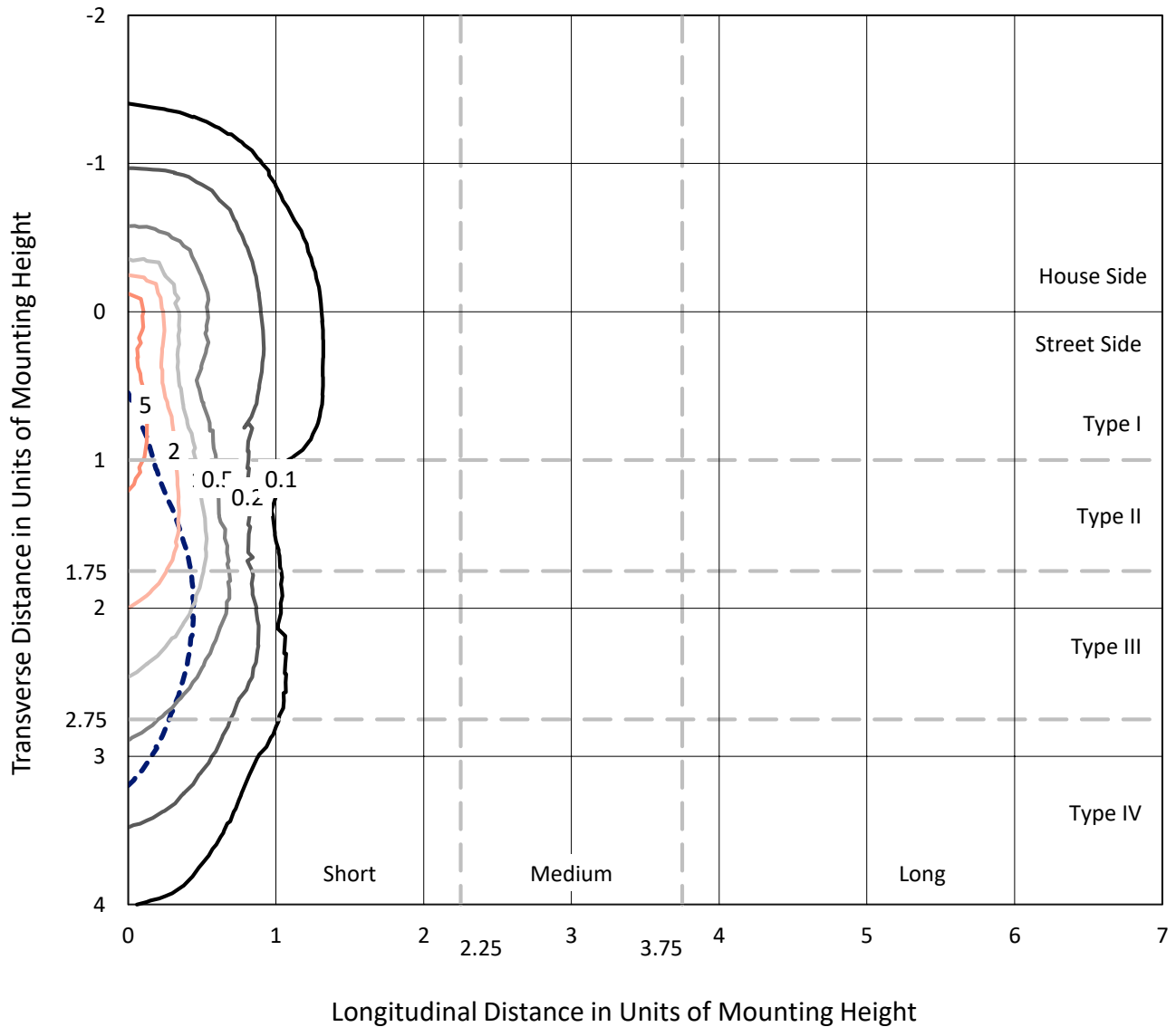
Input Watts (W): 124  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

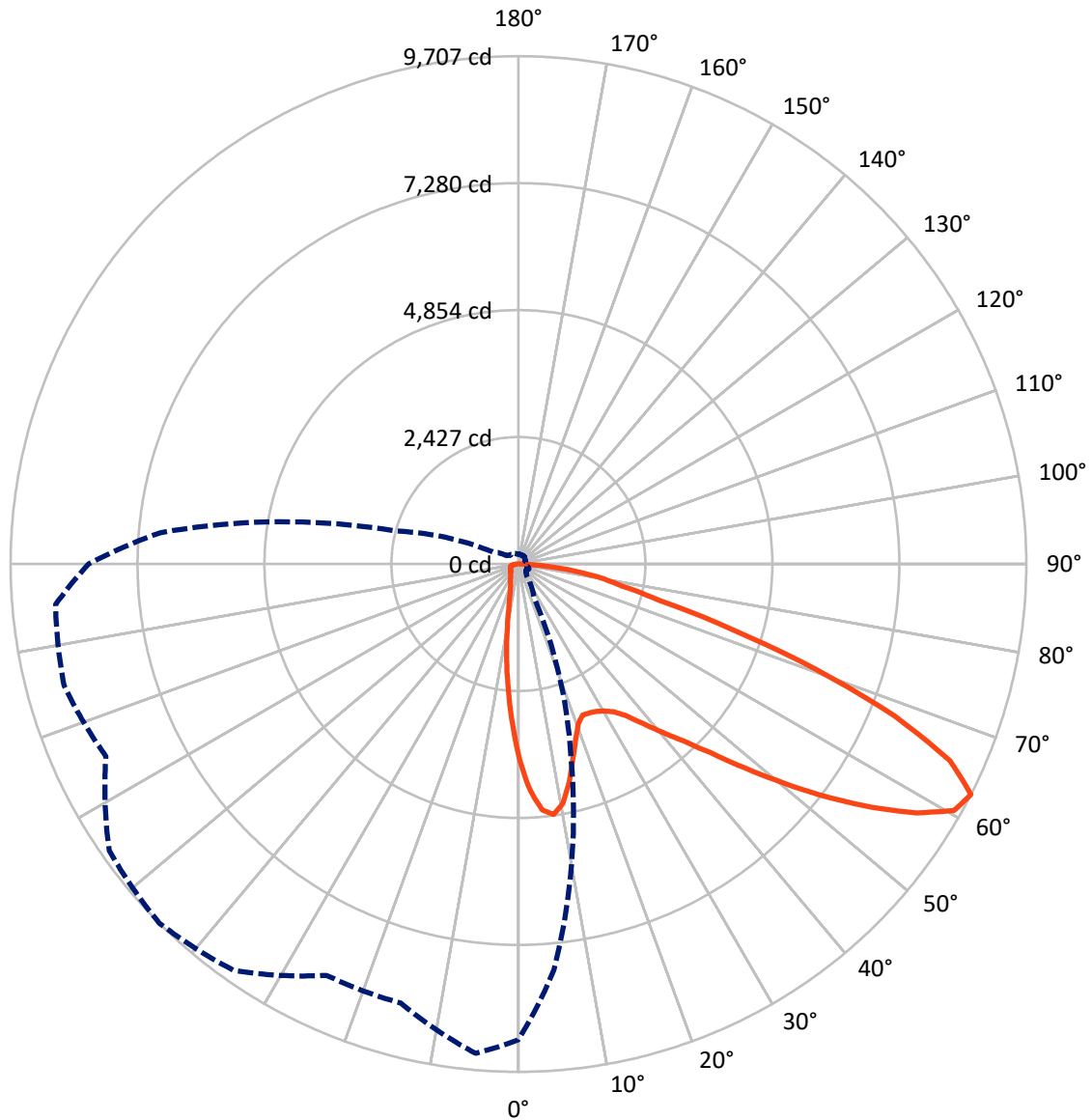
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9.4 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1849.0	0.0	1849.0
	% Fixture	16.5	0.0	16.5
<b>Street Side</b>	Lumens	9323.9	0.0	9323.9
	% Fixture	83.5	0.0	83.5
<b>Total</b>	Lumens	11172.9	0.0	11172.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	274.8	2.5
10°-20°	503.9	4.5
20°-30°	734.7	6.6
30°-40°	1131.5	10.1
40°-50°	1665.3	14.9
50°-60°	2442.6	21.9
60°-70°	2730.4	24.4
70°-80°	1336.8	12.0
80°-90°	353.0	3.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	11172.9	100.0
0°-180°	11172.9	100.0

**Coefficient of Utilization**



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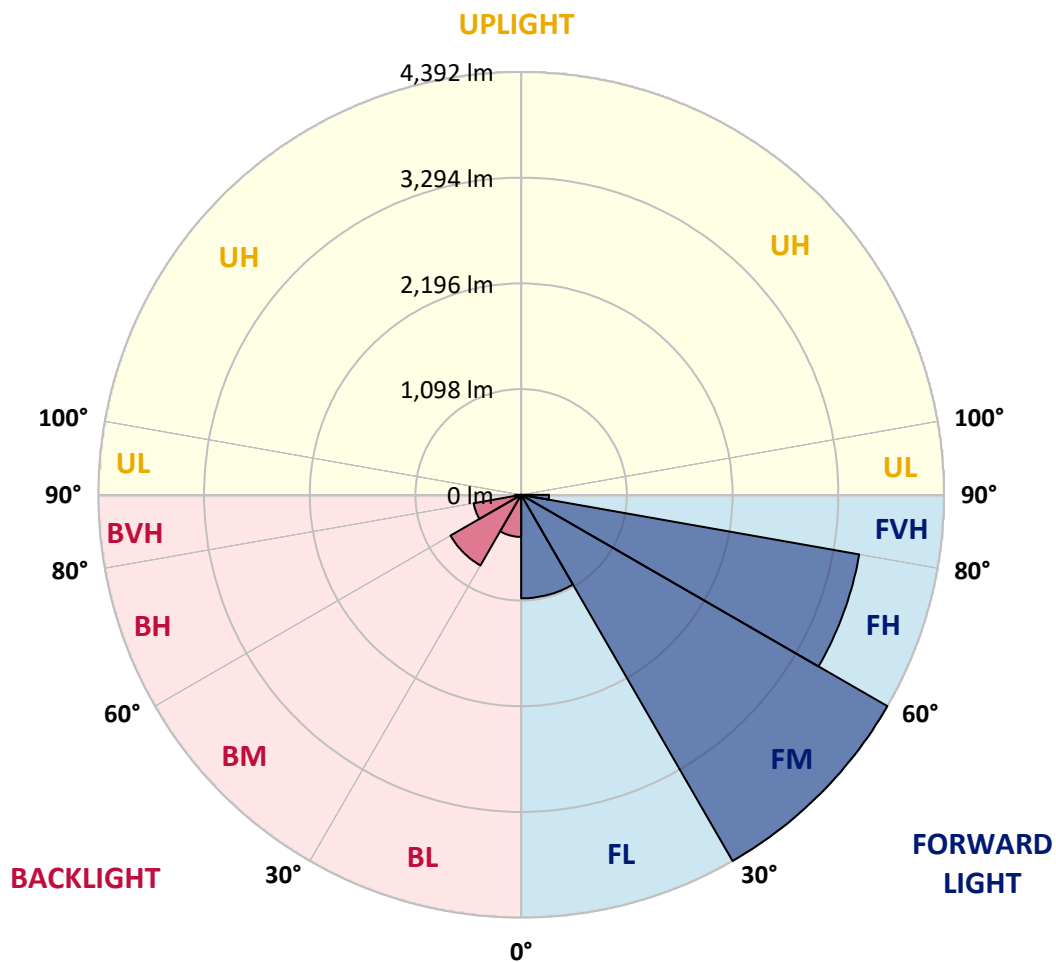
CATALOG NUMBER: GLNA-AF-03-LED-E1-SLR-7027-800

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1075.9	9.6			
FM	(30°-60°)	4392.2	39.3			
FH	(60°-80°)	3566.0	31.9			G2/5000
FVH	(80°-90°)	289.9	2.6			G3/500
BL	(0°-30°)	437.4	3.9	B1/500		
BM	(30°-60°)	847.2	7.6	B1/1000		
BH	(60°-80°)	501.3	4.5	B2/1000		G2/1000
BVH	(80°-90°)	63.1	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9
2.5°	3922.1	3842.4	3709.6	3571.4	3487.4	3389.0	3312.3	3244.8	3109.6	3083.2	3107.2
5°	3688.2	3527.9	3277.9	3026.1	2858.4	2678.4	2538.4	2426.1	2254.7	2224.5	2260.8
7.5°	3313.0	3121.3	2790.9	2469.6	2232.5	2007.7	1856.8	1736.3	1602.4	1544.8	1548.3
10°	2989.3	2773.0	2382.4	2033.0	1838.9	1687.2	1560.0	1436.5	1300.8	1211.7	1187.2
12.5°	2808.0	2559.4	2109.1	1797.1	1617.1	1457.5	1320.5	1188.5	1043.5	952.5	926.9
15°	2776.8	2506.4	2006.6	1646.1	1420.5	1218.6	1057.0	909.6	760.3	686.7	671.2
17.5°	2912.5	2601.1	1973.3	1511.5	1235.7	986.4	788.0	623.4	501.8	465.0	461.9
20°	3172.8	2782.9	1969.1	1385.0	1053.3	761.0	549.1	429.3	376.0	365.4	366.1
22.5°	3538.4	3064.8	2021.9	1289.8	885.6	567.5	412.8	359.2	338.4	328.5	328.5
25°	4011.2	3453.0	2143.5	1220.5	740.0	453.3	364.2	332.3	312.6	305.9	307.2
27.5°	4469.5	3830.6	2284.8	1165.8	644.8	411.5	345.1	316.3	299.2	292.3	295.5
30°	4826.9	4166.1	2402.7	1091.4	596.3	399.8	352.0	322.4	297.9	287.5	288.0
32.5°	5122.9	4459.7	2501.6	1037.9	553.3	342.7	303.4	290.4	287.5	275.2	269.0
35°	5501.3	4779.7	2568.0	1039.2	533.1	305.9	270.2	247.5	230.9	216.8	216.8
37.5°	5944.7	5146.9	2638.6	1053.3	525.8	284.3	258.6	235.8	220.5	206.9	204.5
40°	6383.2	5506.8	2703.1	1066.9	521.4	271.5	249.3	228.5	214.4	200.8	197.1
42.5°	6756.2	5802.9	2760.8	1073.6	506.7	270.2	242.6	223.5	210.1	195.2	191.7
45°	7031.9	6050.9	2822.9	1084.0	492.0	275.2	242.6	222.9	206.4	192.3	188.5
47.5°	7278.1	6342.1	2926.6	1084.0	474.1	265.9	250.6	223.5	205.8	191.0	188.0
50°	7607.9	6741.3	3123.2	1058.9	449.0	256.0	264.0	221.1	200.3	188.5	184.8
52.5°	8062.3	7253.0	3435.2	1015.2	410.4	237.1	262.2	220.0	194.7	182.4	178.1
55°	8599.9	7800.7	3775.4	964.3	352.5	223.5	253.1	216.8	188.5	175.0	170.7
57.5°	9019.4	8177.8	4014.9	885.6	302.1	216.2	224.2	213.8	181.1	167.0	163.4
60°	9186.3	8163.1	4080.7	780.6	277.6	210.1	196.0	239.5	175.0	160.8	156.6
62.5°	9096.1	7786.0	3896.5	706.9	272.0	202.1	183.7	221.6	170.1	156.6	150.4
65°	8679.1	7117.8	3408.2	687.2	288.0	194.1	175.7	173.8	163.4	150.4	144.3
67.5°	7770.6	6119.1	2728.8	689.1	308.3	186.1	167.7	159.2	154.1	143.7	138.2
70°	6329.2	4838.0	2034.1	694.1	318.7	176.8	159.2	149.9	144.3	133.9	130.2
72.5°	4653.8	3728.7	1477.8	662.1	320.6	166.4	147.4	139.5	133.9	122.9	119.7
75°	3184.0	2852.2	1025.1	548.5	279.5	151.7	134.4	127.2	123.5	109.9	108.0
77.5°	2325.9	2141.0	656.0	407.2	215.5	133.3	118.6	113.0	110.6	95.8	93.3
80°	1866.6	1693.9	410.4	278.9	157.9	111.7	99.5	96.5	93.9	79.2	77.3
82.5°	1294.7	1134.4	263.5	181.1	118.6	86.6	78.7	77.3	73.6	60.2	58.4
85°	682.9	616.0	167.0	123.5	85.9	59.5	54.7	54.7	52.8	40.0	38.7
87.5°	87.2	141.9	84.8	64.5	47.2	26.4	26.4	25.8	27.7	22.7	19.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9
2.5°	3050.6	3080.2	3051.9	3053.8	3085.0	3178.4	3220.8	3255.7	3293.3	3317.8	3328.8
5°	2211.1	2279.9	2303.2	2352.3	2424.8	2544.0	2591.2	2625.6	2648.5	2661.9	2667.4
7.5°	1512.2	1553.9	1600.5	1679.7	1837.6	1907.7	1938.9	1930.9	1905.3	1896.0	1886.9
10°	1140.0	1123.4	1114.7	1158.4	1286.1	1356.8	1378.9	1357.3	1343.2	1346.4	1361.6
12.5°	883.2	854.4	819.4	814.4	898.6	961.8	976.0	977.1	1002.9	1025.6	1059.5
15°	643.7	640.5	623.4	613.0	660.8	712.5	718.6	729.6	753.0	769.6	799.0
17.5°	453.9	470.4	484.0	490.7	526.9	563.8	557.1	551.5	547.2	547.2	561.3
20°	366.1	377.1	394.4	413.9	450.9	476.6	460.0	437.9	421.9	417.1	418.9
22.5°	329.8	338.4	348.3	365.4	398.6	416.5	398.6	382.7	366.7	361.1	359.2
25°	311.4	322.4	331.7	344.5	369.1	381.4	364.2	352.5	342.7	336.0	331.0
27.5°	301.0	310.7	313.3	319.4	340.3	351.2	342.7	337.8	331.7	325.6	319.4
30°	289.9	288.0	283.7	284.3	301.0	312.0	311.4	312.6	312.0	310.1	309.0
32.5°	264.8	261.1	257.3	261.1	276.3	286.2	286.9	289.3	289.3	288.8	293.6
35°	220.5	227.2	231.5	242.6	261.1	269.6	265.9	259.8	248.8	241.9	241.3
37.5°	204.0	205.1	212.5	227.8	248.2	256.0	250.6	236.5	229.1	227.8	229.6
40°	196.0	197.1	201.4	215.5	235.8	243.8	238.9	228.5	221.6	221.1	224.2
42.5°	190.4	191.7	194.1	204.0	220.5	230.4	230.9	223.5	215.5	216.2	219.2
45°	187.2	188.0	187.2	192.3	207.5	219.2	224.2	219.2	212.5	213.8	217.4
47.5°	186.7	184.8	182.4	183.7	199.7	211.2	217.4	215.5	212.5	213.8	216.8
50°	184.3	180.0	176.8	176.3	192.3	204.5	210.1	210.1	211.2	213.8	216.8
52.5°	176.8	172.0	172.0	170.1	187.2	199.0	202.7	203.2	205.1	209.4	213.8
55°	167.7	165.9	167.7	164.6	183.7	194.7	196.5	197.8	199.0	202.7	208.8
57.5°	159.7	157.3	161.6	160.3	180.5	190.4	190.4	192.8	192.8	197.8	202.7
60°	155.4	150.4	152.3	153.6	176.3	186.7	185.6	188.0	189.1	193.6	197.1
62.5°	149.9	145.6	145.6	148.6	171.4	181.1	180.5	182.4	187.2	188.5	192.3
65°	143.2	141.3	139.5	143.2	166.4	175.0	175.7	178.1	182.4	183.7	186.7
67.5°	136.3	137.0	133.3	137.0	162.1	168.8	168.8	173.8	175.7	178.1	181.1
70°	129.0	129.6	126.4	130.9	159.2	162.1	161.6	168.3	169.6	171.4	174.4
72.5°	119.7	119.7	118.6	124.8	154.1	155.4	154.1	159.7	160.3	162.1	163.4
75°	109.9	109.9	108.8	117.3	151.2	148.0	144.3	148.6	149.9	151.2	151.2
77.5°	97.1	98.4	98.4	108.8	140.6	145.0	132.6	135.2	137.0	137.6	135.7
80°	81.1	84.2	85.3	98.9	117.9	133.9	118.6	120.3	121.0	121.0	118.6
82.5°	62.1	67.5	70.7	85.3	90.4	112.3	103.2	105.1	103.2	99.5	98.4
85°	43.0	50.4	54.1	65.1	68.2	86.6	85.9	85.9	82.4	77.3	76.8
87.5°	23.4	27.7	30.1	38.7	46.7	58.4	63.2	61.4	58.4	55.2	56.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9
2.5°	3386.6	3470.1	3603.4	3705.3	3808.0	3906.9	4013.8	4095.4	4164.8	4191.9	4274.1
5°	2723.4	2827.7	2953.6	3180.8	3341.8	3519.2	3724.5	3995.9	4100.2	4244.7	4481.0
7.5°	1925.5	2020.0	2222.7	2406.4	2634.3	2885.5	3162.4	3537.0	3674.1	3905.6	4290.6
10°	1437.8	1547.7	1710.4	1865.3	2066.1	2322.9	2641.0	3059.9	3226.4	3477.6	3921.0
12.5°	1158.4	1288.0	1460.5	1606.1	1761.6	1942.7	2251.7	2710.9	2934.1	3153.8	3602.1
15°	889.9	1025.6	1186.1	1370.9	1542.1	1737.6	2061.3	2563.7	2820.3	3049.5	3432.0
17.5°	616.0	732.0	934.1	1127.0	1346.4	1596.3	2008.5	2594.9	2901.3	3165.6	3461.6
20°	436.8	503.0	668.8	892.5	1165.8	1479.5	1998.6	2759.5	3158.1	3459.7	3650.7
22.5°	367.2	391.8	488.3	693.4	1009.1	1392.3	2033.0	2990.4	3504.5	3889.6	3952.2
25°	334.7	349.6	399.8	544.2	869.6	1329.1	2149.0	3334.4	3933.3	4319.7	4308.5
27.5°	316.8	332.3	365.4	459.4	764.8	1289.8	2265.1	3742.3	4423.4	4786.4	4648.8
30°	311.4	332.3	367.2	433.0	689.8	1227.7	2360.3	4100.2	4800.5	5101.5	4803.6
32.5°	307.2	310.1	326.1	373.4	618.4	1155.2	2424.8	4421.5	5169.6	5401.2	5026.6
35°	248.2	263.5	289.3	334.7	576.8	1111.7	2424.8	4698.6	5533.3	5703.9	5239.1
37.5°	238.9	252.5	275.2	313.9	553.3	1090.1	2376.3	4965.8	5904.8	6047.4	5414.1
40°	234.1	245.1	266.6	297.9	543.5	1065.6	2305.6	5201.5	6267.7	6391.2	5577.5
42.5°	230.4	240.2	260.5	288.0	530.7	1038.6	2248.5	5390.6	6582.9	6684.8	5733.5
45°	228.5	238.9	261.1	293.0	504.8	1002.9	2229.6	5595.2	6842.1	6929.8	5902.3
47.5°	228.5	240.8	264.0	303.4	474.1	966.1	2289.1	5865.0	7087.1	7130.1	6101.3
50°	226.7	240.2	272.8	293.0	429.3	919.5	2429.1	6204.5	7352.4	7357.3	6353.2
52.5°	222.9	238.9	293.6	286.9	377.6	858.1	2618.3	6640.7	7745.0	7774.3	6747.4
55°	218.7	237.1	288.0	272.8	335.4	785.0	2773.0	7170.6	8296.4	8378.1	7327.3
57.5°	213.1	234.7	278.9	253.1	307.7	690.9	2829.0	7558.8	8681.5	8886.6	7980.7
60°	208.2	232.8	251.8	241.3	290.4	611.7	2720.8	7482.0	8655.1	9097.3	8559.9
62.5°	203.2	234.7	229.6	234.1	282.4	560.8	2438.4	6867.2	8217.2	8879.9	8989.2
65°	197.8	218.1	216.8	227.8	280.8	540.5	2021.3	5945.3	7370.9	8192.7	9090.6
67.5°	190.4	201.4	207.5	220.0	286.9	522.7	1631.2	4904.2	6194.6	7162.6	8562.3
70°	182.4	191.7	198.4	210.1	283.2	514.7	1356.8	3867.5	4915.4	5870.4	7520.2
72.5°	172.0	180.0	186.1	197.1	279.5	510.4	1146.1	3114.6	3669.8	4360.7	6114.3
75°	159.7	167.0	171.4	182.4	267.7	467.4	901.0	2635.4	2746.1	3033.5	4869.8
77.5°	145.6	151.2	154.7	167.0	237.1	388.8	651.7	2033.0	2132.5	2202.4	3733.6
80°	129.0	134.4	136.3	148.0	196.5	304.0	425.0	1501.6	1595.0	1610.9	2438.4
82.5°	109.9	115.5	115.5	126.4	160.8	218.7	278.9	1028.8	1047.2	1101.3	1723.4
85°	88.5	92.8	92.8	98.4	124.8	163.4	191.7	516.5	511.0	583.5	1493.1
87.5°	63.2	66.4	69.4	70.7	89.1	108.0	115.5	157.3	103.8	119.2	958.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9	3774.9
2.5°	4336.2	4371.2	4335.5	4309.8	4198.6	4107.1	3984.8	3922.1
5°	4661.0	4750.1	4720.0	4611.9	4379.7	4118.7	3822.1	3688.2
7.5°	4621.8	4828.7	4833.6	4631.7	4289.5	3905.0	3503.4	3313.0
10°	4315.9	4580.5	4656.2	4460.2	4097.3	3667.4	3206.6	2989.3
12.5°	3974.4	4233.6	4291.4	4223.7	3920.4	3488.5	3021.3	2808.0
15°	3694.9	3811.1	3879.7	3938.9	3768.7	3417.3	3010.7	2776.8
17.5°	3524.8	3511.9	3531.7	3634.1	3662.9	3498.9	3170.4	2912.5
20°	3463.4	3266.3	3261.3	3402.6	3613.3	3693.8	3482.4	3172.8
22.5°	3497.3	3177.8	3137.3	3305.0	3639.7	3974.4	3891.4	3538.4
25°	3613.8	3185.3	3152.5	3314.9	3735.4	4273.5	4333.0	4011.2
27.5°	3797.5	3231.9	3188.8	3355.4	3862.6	4524.7	4767.9	4469.5
30°	3972.0	3313.0	3259.4	3435.2	3978.6	4624.2	5034.6	4826.9
32.5°	4183.9	3464.7	3370.6	3581.9	4122.4	4782.6	5272.2	5122.9
35°	4391.4	3680.8	3564.2	3808.5	4282.7	4979.9	5543.7	5501.3
37.5°	4619.4	3963.4	3866.9	4101.5	4502.1	5165.8	5890.1	5944.7
40°	4862.6	4338.1	4223.7	4529.0	4842.3	5399.4	6251.9	6383.2
42.5°	5107.6	4753.8	4617.5	4926.9	5216.2	5629.6	6561.3	6756.2
45°	5388.2	5205.3	5140.7	5475.4	5575.6	5849.0	6789.8	7031.9
47.5°	5715.1	5717.5	5821.3	5955.1	5938.0	6097.0	7019.6	7278.1
50°	6096.5	6356.8	6586.0	6674.9	6311.4	6363.6	7338.3	7607.9
52.5°	6554.6	7121.5	7405.3	7346.9	6713.8	6689.0	7843.1	8062.3
55°	7127.6	7931.1	8213.0	8171.1	7176.2	7132.5	8472.1	8599.9
57.5°	7790.9	8715.4	8974.5	8786.6	7731.4	7619.1	8992.4	9019.4
60°	8373.8	9336.9	9564.1	9355.9	8291.6	8136.7	9317.2	9186.3
62.5°	8698.1	9547.6	9707.3	9483.1	8675.4	8688.2	9388.4	9096.1
65°	8553.2	9015.1	9066.6	9048.2	8576.5	9008.2	9132.4	8679.1
67.5°	7759.6	7668.7	7755.4	7875.1	7729.0	8586.9	8422.9	7770.6
70°	6361.8	5862.4	6035.1	6115.4	6181.8	7389.3	7310.6	6329.2
72.5°	4794.3	4107.1	4243.4	4226.9	4533.8	5926.9	5685.5	4653.8
75°	3397.0	2784.8	2801.9	2795.2	3163.7	4637.0	4117.0	3184.0
77.5°	2376.8	2017.6	2026.9	2064.8	2126.9	3497.3	2941.3	2325.9
80°	1634.4	1531.2	1582.1	1585.3	1474.1	2349.3	2173.0	1866.6
82.5°	1217.3	1064.3	1052.0	1069.9	1155.2	1903.4	1669.9	1294.7
85°	996.8	630.1	506.7	635.2	1023.8	1885.0	1109.3	682.9
87.5°	561.3	299.2	135.2	250.6	408.5	1248.0	320.6	87.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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